

CALIFORNIA STATE  
BOARD OF PHARMACY

**PHARMACY MANPOWER  
TASK FORCE**

***A working group to ensure patient access to  
pharmacist's care and prescription services***

FINAL REPORT

NOVEMBER 12, 2001

## TABLE OF CONTENTS

|   |    |
|---|----|
| Executive Summary.....                                      | 3  |
| Manpower Task Force Members.....                            | 4  |
| Summary of Votes on Solution Statements.....                | 5  |
| Introduction .....  | 9  |
| Manpower Task Force Attendance.....                         | 10 |
| Methodology.....  | 11 |
| Minutes: January 23, 2001 .....                             | 16 |
| Minutes: April 27, 2001 .....                               | 25 |
| Minutes: June 8, 2001 .....                                 | 29 |
| Minutes: July 24, 2001 .....                                | 38 |
| Minutes: October 10, 2001 .....                             | 49 |
| List of Resource Documents .....                            | 59 |
| Annotated Bibliography on Pharmacist Workforce Issues ..... | 61 |

## **EXECUTIVE SUMMARY**

The California State Board of Pharmacy conducted a series of five Manpower Task Force Meetings held throughout the state during calendar year 2001. The purpose of the task force was to address the question of the pharmacist shortage in California to ensure that patients have access to pharmacist's care and prescription services. The board asked the task force to generate a set of proposed solutions to be submitted to the Board of Pharmacy for review and possible adoption. All task force meetings were open to the public. The following report summarizes the outcomes of the task force meetings.

The report is comprised of four primary sections. Those sections are attendance chart, methodology, a set of minutes, and a list of available documents. An attendance chart is provided to reflect those task force members attending each public task force meeting as well as noting those whom had substitutes. The methodology section describes the procedure followed for each public task force meeting. The next section provides a condensed version of votes on proposed solution statements that evolved from the task force meetings. Next, a complete set of minutes of each task force meeting is included. Finally a list of available documents is provided that refers to all the background material that was requested and used in the task force meeting discussions.

A list of Manpower Task Force members is provided at the conclusion of the executive summary. Also, a summary of votes on proposed solution statements is provided at the conclusion of the executive summary. The table reflects the results of those task force members voting yes, no, or abstain on each proposed solution statement. Total votes may vary across items depending on the task force meeting date and those in attendance at the time of the vote. Also included are a list of reversed solutions and a list of solutions the panel voted not to discuss.

Over the course of 5 meetings and 10 months, deliberations by the task force were thoughtful and comprehensive. Panel members were serious about their charge and worked to achieve a set of proposed solutions that reflect their collective consensus. The report reflects the task force recommended solution statements for consideration by the Board of Pharmacy.

The report reflects the unified, dedicated results of the task force's efforts. The task force feels it has successfully completed its charge and provides the following report.

## MANPOWER TASK FORCE MEMBERS

| <b>Members</b>   |
|--|
| <b>Holly Strom, R.Ph.</b><br>Board of Pharmacy Board Member  |
| <b>Don Gubbins, Pharm.D.</b><br>Board of Pharmacy Board Member   |
| <b>Fred G. Weissman, Pharm.D., J.D.</b><br>Associate Dean for Academic Affairs<br>USC School of Pharmacy   |
| <b>Katherine Knapp, Ph.D.</b><br>Director, Center for Pharmacy Practice Research<br>and Development, and Professor of Social<br>and Administrative Sciences<br>Western University of Health Sciences |
| <b>Donald Floriddia, R.Ph., Ph.D.</b><br>Associate Dean for Student Life<br>University of the Pacific  |
| <b>Lloyd Y. Young, Pharm.D.</b><br>Professor and Chair<br>Department of Clinical Pharmacy, UCSF  |
| <b>Harold J. Washington, Jr., Pharm.D.</b><br>President, California Pharmacists Association  |
| <b>Alan Endo, Pharm.D., FCSHP</b><br>Director of Pharmacy, Riverside Community Hospital<br>California Society of Health System Pharmacists   |
| <b>Dave Fong, Pharm.D.</b><br>Senior Vice President of Pharmacy, Longs Drugs<br>California Retailers Association   |
| <b>Nancy Stalker, Pharm.D.</b><br>Vice President of Pharmacy Services<br>Blue Shield of California<br>California Association of Health Plans   |
| <b>Frederick S. Mayer, R.Ph., M.P.H.</b><br>President, Pharmacists Planning Service, Inc.  |
| <b>Ralph Duff, Sr., Pharm.D.</b><br>California Employee Pharmacist Association   |
| <b>Ralph Vogel, Pharm.D.</b><br>President and Executive Director<br>Guild for Professional Pharmacists   |
| <b>Arnold Godmintz</b><br>Consumer Representative  |
| <b>John A. Pèrez</b><br>Director of Political Affairs, Local 324<br>United Food and Commercial Workers   |

## SUMMARY OF VOTES ON SOLUTION STATEMENTS

| SOLUTION # AND DESCRIPTION |  | YES | NO | ABSTAIN |
|----------------------------|--|-----|----|---------|
| <b>C-1:</b>                | Expansion of the role of technicians could alleviate the manpower shortage when appropriate quality assurance processes are in place with the goal of increasing the pharmacist's role in performing patient care services.  | 9   | -  | -       |
| <b>C-4:</b>                | Expansion of ratio and role of technicians could mitigate shortage when appropriate quality assurance is in place ensuring the pharmacist's role in performing patient care services.  | 11  | -  | -       |
| <b>C-7:</b>                | Allow only PTCB certified technicians to check technicians in the inpatient hospital pharmacy for unit dose drug distribution systems.   | 6   | 5  | 2       |
| <b>B-2:</b>                | Require the Pharmacy Technician Certification Board (PTCB) examination as a qualification for technician registration. All technicians must demonstrate a minimum level of competencies (test, classroom, experience) in order to be registered. Must include a grandfather provision with a window of opportunity to take an exam and pass.   | 11  | -  | 1       |
| <b>C-8:</b>                | Increase the number of pharmacist interns a pharmacist can supervise.<br>Modification: Change the number of pharmacy interns a pharmacist may supervise to two at any one time.  | 10  | 1  | -       |
| <b>C-3:</b>                | Eliminate the clerk-typist ratio.  | 3   | 8  | -       |
| <b>A-4:</b>                | Expansion of Central Processing could mitigate the pharmacists shortage with the following caveats:<br>1. Protect patient confidentiality.<br>2. Right to face-to-face counseling.<br>3. New Rx transmitted electronically to pharmacy.<br>4. Pharmacist has discretion to where Rx gets "pushed."<br>5. Ability to check patient profile. Payer usually does cross-checking. (In practice, this might be impossible).<br>6. Electronic data is available to everyone that needs it. | 10  | -  | 1       |

|             |  |                      |   |   |
|-------------|--|----------------------|---|---|
|             | <p>7. If done correctly, this process is transparent to patient.<br/>Any other information that may be pertinent to patient care is available.</p>   |                      |   |   |
| <b>A-5:</b> | <p>Facilitate the increased use of technology and distribute information on how technology can improve efficiencies. Included are the following caveats:</p> <ol style="list-style-type: none"> <li>1. Empower the Board of Pharmacy to authorize projects that evaluate, test, and implement new technology that would enhance patient care all within the current laws rules, and regulations.</li> <li>2. Technology should be safe, effective, patient-centered, timely, efficient and equitable.</li> </ol>   | 10                   | - | (one member left early to catch a flight) |
| <b>D-1:</b> | Offer the exam more than 2 times per year with the goal of moving toward offering it on a continuous basis.  | 12<br>unan-<br>imous | - | -   |
| <b>D-4:</b> | Consider re-testing multiple choice or essay section only if only one is failed. Furthermore, the board should evaluate whether the essay adequately measures what it is supposed to.  | 12<br>unan-<br>imous | - | -   |
| <b>D-7:</b> | <p>Assist applicants preparing for the California pharmacist licensing exam by:</p> <ol style="list-style-type: none"> <li>1. Developing (or fostering the development of) educational programs and information on how to take the pharmacist exam.</li> <li>2. Request that outside agencies (schools of pharmacy and private educational organizations) develop exam workshops on how to take the California Pharmacist Exam.</li> <li>3. Develop and distribute an informational brochure that contains simple essay questions for the California pharmacist licensing exam.</li> </ol> | 11                   | - | 1   |

|             |   |                      |   |                               |
|-------------|---|----------------------|---|-------------------------------|
| <b>H-3:</b> | Allow the board to grant waivers to keep pace with innovative, technological and other advancements to enhance the practice of pharmacy.  | 12                   | - | one member is out of the room |
| <b>I-2:</b> | Provide scholarships/grants to pharmacy students who will then practice in underserved areas of California. It was suggested that one way to do this is to sponsor legislation providing scholarships and forgiving student loans by creating a health care workers foundation to attract and retain pharmacists in underserved areas including communities where there is a pharmacist shortage. This entity should be a nonprofit corporation with the goal of raising funds from foundations and governmental agencies and other sources to ensure patient access to pharmacists' care and prescription services.<br>Motion to vote 1-2 and use suggested statement as one way it might be accomplished. Seconded. | 12<br>unani-<br>mous | - | -                             |

**Comments:**

**C-1, C-4, B-2 must be passed together, or they don't make sense.**

## SUMMARY OF VOTES ON REVERSED SOLUTION STATEMENTS

| SOLUTION # AND DESCRIPTION |  | YES | NO | ABSTAIN         |
|----------------------------|--|-----|----|-----------------|
| <b>E-1:</b>                | The task force rejects the concept of reciprocity.   | 6   | 5  | 2               |
| <b>E-4:</b>                | The task force rejects the idea of a temporary one-year license for out of state pharmacists.  | 8   | 4  | One member left |
| <b>D-8:</b>                | The task force rejects the notion of increasing the number of failed attempts from 4 to 6 before an applicant has to take additional coursework. | 8   | 1  | 3               |

### Solutions the panel voted not to discuss:

|       |   |
|-------|---|
| A-3:  | Limit the number of telephones.   |
| C-6:  | Create a “Pharmacist’s Assistant” classification.   |
| F-6:  | Allow all community pharmacies to be automatically enrolled in all HMOs as a universal provider.  |
| G-1:  | Allow the pharmacist-in-charge to be in-charge of more than one pharmacy.   |
| G-3:  | Require patient consultation on all new and refill prescriptions.   |
| G-6:  | Require pharmacies requesting new pharmacy licenses have sufficient pharmacist hired, prior to opening, without raiding other pharmacies.                   |
| G-10: | Implement quality assurance programs to measure prescription workload and errors.   |
| H-1:  | Require community pharmacies to be accredited.  |
| H-2:  | Limit the number of pharmacy permits.   |
| I-6:  | Do nothing.   |
| I-7:  | Re-establish the Bachelor of Pharmacy four-year degree program to oversee the drug distribution, pharmacy technician dispensing and to manage the pharmacy. |



## INTRODUCTION

The California State Board of Pharmacy conducted a series of five Manpower Task Force Meetings held throughout the calendar year 2001. The purpose of the task force was to address the question of the pharmacist shortage in California and generate a set of proposed solutions to be submitted to the Board of Pharmacy for review and adoption. All task force meetings were open to the public. The task force meetings were held in various cities starting with Los Angeles (January 23rd), Sacramento (April 27), Los Angeles (June 8), San Diego (July 24), and Sacramento (October 10). A report is provided summarizing the outcomes of the task force meetings.

The report contains several sections pertaining to the operations and outcomes of the public task force meetings. The sections include an attendance chart, methodology, a set of minutes, and a list of available documents. An attendance chart is provided to reflect those attending each public task force meeting as well as noting those whom had substitutes. The methodology section describes the procedure followed for each public task force meeting. Basic operating instructions and protocol were outlined at the beginning of each meeting to facilitate the management of the agenda and complete the activities for that particular task force meeting. Next, a complete set of minutes of each task force meeting is included. The minutes contain the meeting's operating instructions, detailed discussion on proposed solutions, action, and votes. Finally a list of available documents is provided that refers to all the background material that was requested and used in the task force meeting discussions. The background material was an integral part of the task force's discussions that led to the final votes on proposed solution statements.

Over the course of 5 meetings and 10 months, deliberations by the task force were thoughtful and comprehensive. Panel members were serious about their charge and worked to achieve a set of proposed solutions that reflect their collective consensus. The report reflects the task force recommended solution statements for consideration by the Board of Pharmacy.

The report reflects the unified, dedicated results of the task force's efforts. The task force feels it has successfully completed its charge and provides the following report.

**PHARMACY MANPOWER TASK FORCE ATTENDANCE**  
**ALL MEETINGS HELD IN 2001**

| MEMBER'S ATTENDANCE<br>*=PRESENT; -=ABSENT; NAME = SUBSTITUTE | JAN 23<br>LA | APR 27<br>SAC | JUN 8<br>USC | JUL 24<br>SD    | OCT 10<br>SAC |
|---|--------------|---------------|--------------|-----------------|---------------|
| Ralph Duff  | *            | *             | -            | *               | P.<br>Grauss  |
| Alan Endo   | *            | *             | *            | *               | *             |
| Donald Floriddia  | *            | -             | -            | -               | *             |
| Dave Fong   | *            | *             | *            | *               | *             |
| Arnold Godmintz   | *            | *             | *            | *               | *             |
| Don Gubbins   | *            | *             | *            | *               | *             |
| Katherine Knapp   | *            | *             | *            | *               | -             |
| Frederick Mayer   | *            | *             | *            | P. Grauss       | *             |
| John Pèrez  | *            | -             | -            | *               | *             |
| Nancy Stalker   | *            | *             | *            | *               | *             |
| Holly Strom   | *            | *             | *            | *               | *             |
| Ralph Vogel   | *            | *             | *            | M.<br>Goldstein | H. Hertz      |
| Harold Washington   | *            | *             | -            | *               | *             |
| Fred Weissman   | *            | *             | *            | *               | *             |
| Lloyd Young   | *            | *             | *            | -               | *             |

## **METHODOLOGY**

### **First Task Force Meeting (Los Angeles, January 23rd)**

The first task force meeting was conducted in Los Angeles. A set of basic ground rules for each forum was reviewed. In round table fashion, panel members were requested to offer their proposed solutions to the manpower shortage. Panel members were given 4 minutes to highlight their proposed solutions. The floor was then opened to the audience for additional solutions and comments. At the conclusion of the first task force meeting all solutions were reviewed and summarized. In addition, the panel members and audience were given instructions concerning homework on the proposed solutions for the next task force meeting.

Generating a list of proposed solutions occupied the entire first task force meeting. As panel members' proposed solutions were transcribed, the facilitator noticed that general categories or themes were emerging. Comments were then "cut and pasted" under the categories, with identifiers (initials or names) being stripped from the comments. The stripping process helped to put each idea on equal footing, so that it could be considered separate from its source.

The solutions were arranged by category and sent back to panel members as homework for the next task force meeting. A sample template was given to the task force members and the public to use in submitting their documentation for each proposed solution. Panel members and the public had the opportunity to send documentation supporting any particular solution to the board. Proposed solutions and any additional solutions that came back to the board with supporting documentation were kept on the list of "Proposed Solutions." The list of solutions that came back with documentation is included in the body of the report. Solutions without documentation were deleted and not considered in subsequent task force meetings.

### **Second Task Force Meeting (Sacramento, April 27th)**

Panel members were provided a packet of material containing a summary list of proposed solutions and the support documentation that was submitted. The packet was mailed to the panel members in advance so they could review it and be prepared to discuss.

At the beginning of the second task force meeting panel members were asked to vote for the top three categories they wished to discuss. The reason for this procedure was to prioritize the categories for discussion. The top three categories voted by the panel in order were: Category C: Use of Ancillary Support, Category G: Workload, Working Conditions; and Category A: Technology. By common consent, the one solution in Category B: Technician Training was merged with Category C.

After categories were prioritized the panel began discussing each of the proposed solutions under Category C. Panel members made comments as they wished discussing the pros and cons of each proposed solution. If another member had a

question, the member could respond. Occasionally, the facilitator solicited comments from less vocal panelists.

On several of the proposed solutions, panelists suggested “friendly amendments” or caveats to clarify or justify the proposed solution. These amendments or caveats were then voted on instead of the original proposed solution. Depending on the vote a proposed solution may or may not have been modified to reflect the general consensus and understanding by the panel. Votes on proposed solutions were by raise of hands.

Panel members were instructed at the conclusion of the second task force meeting to continue reviewing remaining categories. Category C was not completed during the second task force meeting. The panel was to begin the third task force meeting with all remaining items under Category C. In addition, panel members were instructed to continue their preparation on the next set of prioritized categories as homework for the third task force meeting.

### **Third Task Force Meeting (Los Angeles, June 8th)**

To more effectively manage proposed solutions and because the discussion at the second meeting went very slowly, the facilitator modified the procedure for managing the remaining proposed solutions. Panel members were asked to vote whether or not to discuss individual proposed solutions under each category. Using this method, many proposed solutions were “weeded out.” The methodology was designed to allow the panel more time to discuss only the most important proposed solutions. Votes on items chosen for discussion are included in minutes of the June, July, and October meeting. A summary of proposed solutions the panel voted not to discuss is included in the Summary of Votes section of this report. In three instances, the panel voted to send statements to the Board rejecting the proposed solution.

Because of the controversy surrounding the Tech Check Tech solution under Category C, the facilitator asked each panel member for a position statement. These comments were solicited in the June meeting and the October meeting. On no other proposed solution did the facilitator follow this procedure. The statements are recorded in the minutes.

At the conclusion of the third task force meeting, the facilitator reminded panel members of their homework for the next task force meeting. The panel was to continue their review and preparation of the remaining proposed solutions.

### **Fourth Task Force Meeting (San Diego, July 24th)**

The agenda was reviewed with the panel at the beginning of the task force meeting. The first item was to continue the discussion on solution C-7, Tech Check Tech, then to manage Category G: Workload and Working Conditions. After those items the panel was instructed to rank the remaining categories to determine the order of discussion. The remaining categories included: Category D (California Pharmacist Licensure Examination), Category E (Reciprocity),

Category F (Third Party Payers), Category H (Pharmacies), and Category I (Miscellaneous).

At the conclusion of the third task force meeting the panel was reminded of the remaining work to be completed in the next meeting. All supporting materials pertaining to the C-7, Tech Check Tech solution, were to be provided to panel members for their comprehensive review. A one-hour time certain discussion was to be allotted to C-7 and then the panel would be called for a vote. The remaining proposed solutions would then be discussed. All panel members were instructed to complete their homework and be prepared so the agenda could be effectively managed.

### **Final Task Force Meeting (Sacramento, October 10th)**

The agenda for the meeting was reviewed. Because of the one-hour time certain parameter the facilitator asked panel members to give their position statement on C-7. A vote would then be called and the remaining proposed solutions would be discussed.

During the morning segment of the task force meeting a couple of modifications were approved. First, immediately after the lunch period the vote on C-7 would be called. The panel wanted to allow one panel member, who was arriving during the lunch period, to be included in the final vote. Second, a summary of votes from all sessions, including today's, would be posted and reviewed so the panel could have a sense of its work efforts.

### **General**

"Plus/Delta" comments were solicited from panel members by the facilitator after the first three meetings. "Plus" comments are things the panelists liked about the meeting; "Delta" comments are things the panelists wanted changed for future meetings. These comments were for the facilitator's use in making each meeting as productive as possible. Comments were included in the packages sent to the panelists after each session, but are not included in the final report.

After the June meeting, the facilitator prepared a "Summary of Votes to Date" for panel members to have a quick review of the work that had been completed. A similar summary was prepared after a break at the October meeting so that the panelists could review and assess everything that had been voted on before the task force concluded its work. An abbreviated summary of votes provided in the next section of this report represents the synthesis of the panel's voting.

## LIST OF SOLUTIONS BY CATEGORY

### SOLUTIONS WITH DOCUMENTATION ONLY

| <b>A: Technology/Automation</b> |  |
|---------------------------------|--|
| A-3:                            | Limit the number of telephones.  |
| A-4:                            | Allow for centralized processing that provides pharmacists with the opportunity to perform drug utilization review, consultation, initiate prescriptions and issue compliance reminders from a centralized location. |
| A-5:                            | Facilitate the increased use of technology by removing existing legislative or regulatory barriers and distributing information on how technology can improve efficiencies.  |

| <b>B: Technician Training</b> |   |
|-------------------------------|---|
| B-3:                          | Require the Pharmacy Technician Certification Board (PTCB) examination as a qualification for technician. |

| <b>C: Use of Ancillary Support</b> |   |
|------------------------------------|---|
| A-1:                               | Expand the duties of the technician.  |
| A-3:                               | Eliminate the clerk-typist ratio (e.g. increase the clerical help to take refill information and generate the prescription label).    |
| A-4:                               | Increase the ratio of technicians to pharmacists.   |
| A-6:                               | Create a pharmacist assistant classification, require a two-year college degree and determine the duties of the pharmacist assistant. |
| A-7:                               | Allow technicians to check technicians in the inpatient hospital pharmacy for unit dose drug distribution systems.                    |
| A-8:                               | Increase the number of pharmacist interns a pharmacist can supervise.   |

| <b>D: California Pharmacist Licensure Examination</b> |  |
|---|--|
| D-1:  | Offer the examination more than two times per year.  |
| D-4:  | Eliminate the essay section and only offer a multiple choice/ true-false format.                               |
| D-7:  | Assist applicants in preparing for the examination.  |
| D-8:  | Increase the number of failed attempts from four to six before an applicant has to take additional coursework. |

| <b>E: Reciprocity</b> |   |
|-----------------------|---|
| E-1:                  | Allow reciprocity.  |
| E-4:                  | Provide a one year temporary license to a pharmacist licensed in another state. |

| <b>F: Third Party Payers</b> |   |
|------------------------------|---|
| F-5:                         | Require a universal prescription insurance card.  |
| F-6:                         | Allow all community pharmacies to be automatically enrolled in all HMO's as a universal provider. |

| <b>G: Workload/Working Conditions</b> |   |
|---------------------------------------|---|
| G-1:                                  | Allow the pharmacist-in-charge to be in-charge of more than one pharmacy.         |
| G-3:                                  | Require patient consultation on all new and refill prescription.                  |
| G-6:                                  | Mandate that a pharmacy has adequate staffing.                                    |
| G-10:                                 | Implement quality assurance programs to measure prescription workload and errors. |

| <b>H: Pharmacies</b> |  |
|----------------------|--|
| H-1:                 | Require community pharmacies to be accredited.   |
| H-2:                 | Limit the number of pharmacy permits issued.   |
| H-3:                 | Allow the board to grant waivers to keep pace with innovative, technological and other advancements to enhance the practice of pharmacy. |

| <b>I: Miscellaneous</b> |   |
|-------------------------|---|
| I-2:                    | Provide scholarships/grants to pharmacy students who will then practice in underserved areas of California.   |
| I-6:                    | Do nothing.   |
| I-7:                    | Re-establish the Bachelor of Pharmacy four-year degree program to oversee the drug distribution, pharmacy technician dispensing and to manage the pharmacy. |

## **MINUTES: JANUARY 23, 2001 MANPOWER TASK FORCE MEETING**

### **CALL TO ORDER AND WELCOME**

President Bob Elsner called the meeting to order at 10 a.m.

President Elsner welcomed those present - members, stakeholders, and the public. He mentioned that the task force consisted of knowledgeable people with a wide range of backgrounds. The mission of the board is to ensure patient access to pharmacist's care.

President Elsner acknowledged that problems exist in California and there is no need to dwell on them. The task force is to address problems with solutions. No alternates or proxies will be allowed on the task force, as continuity is desired.

Lindle Hatton is the facilitator for the manpower forums this year.

The Board has no preconceived solutions and nothing has been decided. Previous solutions will be repeated. There will be no posturing and filibuster. There will be time limits. Estimates and data for solutions are required. Some solutions may involve legislation. A sense of support and opposition would be needed to determine viability of solutions before being sent to legislation.

President Elsner thanked the task force for their commitment.

Holly Strom, chair of the Board of Pharmacy's Licensing Committee offered the following comments:

- Statistics: Between 1990 and 1999, 3 billion prescriptions per year were filled.  
Between 1999 and 2005, 4 billion prescriptions per year are estimated to be filled.
- California has 10 percent of the U.S. population.
- Almost 50 percent of prescriptions are taken incorrectly.
- There is an urgent need that Californians have appropriate access to pharmacist's care.
- Reasonable solutions to pharmacist's care must be found.

Lindle Hatton, the facilitator, made introductions and introduced the ground rules. There is to be no debate and rebuttal. Participants should review template.

Dave Fong recommended the task force wrap up by end of June.

Patty Harris confirmed that this was the intention.

Katherine Knapp asked for cooperative solutions, not competing solutions.



Ralph Vogel asked that meetings be held in the evening so pharmacists and the public could speak.

Bruce Young from the audience asked for more time for the public so the public can make comments about solutions.

Concerning the Annotated Bibliography, everyone was asked to review.

Lindle Hatton invited everyone to respond to the survey included in the task force meeting material for today.

The task force is to send solutions to the board. Other bodies are free to pursue their own course of action.

Dave Fong hopes the board takes solutions seriously.

Some concerns about the format were expressed.

- Need fact finding first.
- What is "pharmacist care"?
- Definition of "pharmacist care" read by Holly Strom.

John Pèrez mentioned that procedurally there needs to be more discussion of issues.

The meeting then proceeded with statements from the panel and audience.

## **SOLUTION STATEMENTS AND COMMENTS FROM PANEL AND AUDIENCE BY CATEGORY**

### **TECHNOLOGY**

#### **SOLUTIONS**

- Technology - automation - electronic Rx
  - reduce error rates
  - gives pharmacists more time with patients
- Efficiency through robotics - drug distribution
- Use of technology - automation
  - computer assistance
  - help prevent adverse events
- Automation - limit number of phones
- Electronic transmission of Rx - fraud?
- Board need to update regulations on electronic transmission
- New technology - Rx, faxes
  - technology will provide security
  - allow technology to move forward
- Centralize processing
- Diagnosis - central processing is preferred vs. central fill

### **TECHNICIAN TRAINING**

#### **SOLUTIONS**

- Technician training - more utilization of technicians' skills
- Raise requirements for technician training
  - expedite certification process
  - anyone who passes PTC
- Better trained technicians
- Change technician training hours
  - PTC certification
  - objective assessment could have more technicians
- Pursue pharmacists assistant - 2 year college degree
- Articulation agreements between schools of pharmacy and pharmacy technicians
- Standardized curriculum for pharmacists technicians and assistants
- Get technicians properly trained on present functions before adding new functions or changing ratios
- Expeditiously train technicians - 240 hours is adequate for out-patient, 600 for acute
- Make use of existing training programs
- Technician training is on a down swing - technicians need more training
- Improve technician training
- Technicians required to be certified - 12 months
- Each store to have training and testing
- Role of pharmacists assistant - they should be certified

#### **COMMENTS**

- There are junior college programs (technician training)
- There is a national model (technician training)

## **TECHNICIAN UTILIZATION/ RATIOS**

### **SOLUTIONS**

- Expand technician duties - look at other jobs technicians could do
- Increase utilization of technicians and clerks
- Upgrade and expand roles of technicians and clerks
  - ex: physical therapy - the aid role was upgraded via education and training
  - now there is a physical therapist assistant - requires a 2 year degree
- Better utilize ancillary personnel to do non-discretionary tasks
- Expand role of technicians via TCT (tech check tech)
  - board makes decision
  - technicians get training and supervision
- Support TCT - in-patient has been successful but need more dialogue and analysis
- Expand role of technician
- Use pharmacist assistants
- Rearrange roles in pharmacies
- Expand role of technician: supervised vs. unsupervised
  - Arizona, Oregon, and Virginia models
- Expand clerk/typist duties
- Increase number of secretarial support - frees pharmacist for important tasks
- Adequate staffing
- Use 2-tier system: pharmacist assistant and pharmacist technician
- Expand ratio of technician - certified
- Eliminate current ratio of clerk/typist
  - insurance claims
  - pharmacists spend too much time on clerical tasks
- Evaluate ratio - all are arbitrary - what is reasonable? Defer to PIC
- Eliminate clerk/typist ratio so there is more clerical help
- Change ratio - pharmacists need more time to review profiles and counsel
- Increase technician/pharmacist ratio in community setting - 2 people filling
- Get away from ratios - leave to pharmacist
- Technician ratios - 3:1 is acceptable and manageable
- Do not use national model for out patient
- Board needs to take responsibility in workload issues, let pharmacists dictate what goes on

### **COMMENTS**

- Not enough data on technician ratio 1:1?
- Error rates are unacceptable – 80 percent of errors are made by technicians

## **EXAM**

### **SOLUTIONS**

- Provide exam more than 2 times per year and expedite test results
- Increase number of times exam is offered
- Offer exams more than 2 times/year
- Timing and number of exams offered
- Increase number of times exam offered

- Offer exam 3 time/year
- Take exam by appointment
- Evaluate the California exam to see if it is an appropriate and necessary exam (or is it an obstacle?)
- Evaluate NAPLEX - the California Board of Pharmacy is conducting an evaluation of the NAPLEX.
- Evaluate exam - is it an obstacle to new pharmacists?
- Use all multiple choice and true/false tests - more objective
  - easily graded with scantron.
- Make more multiple choice - fair
- Open up test to seniors in the last semester.
- Eliminate essay portion and make an entire multiple choice exam
  - the essay portions slows down test results
- Keep essay - it's important.
  - essay makes applicant come up with original answer
  - the essay is new every time and cannot be compromised (like the multiple choice)
- Change essay portion of exam
  - too heavily weighted and skewed
  - only tests small part of curriculum
- Decrease turn-around time of grading exam
- Students should raise personal standards
- California model of exams - not NAPLEX

### **COMMENTS**

- State board exam limits pharmacists
- Licensing constraints: time and cost - particularly for foreign graduates
- California has high standard because of essay portion

### **RECIPROCITY SOLUTIONS**

- Allow reciprocity - NAPLEX is a good test
- Reciprocity is NOT a solution
- Reciprocity not viable - NAPLEX testers do not do as well as CA testers
- No reciprocity - pharmacists will leave California
- Foreign pharmacists - evaluate on merits
- Take advantage of skills of foreign pharmacists
- Test foreigners on national/state laws and language skills
- Reciprocity is a bad thing
- Provide a one year temporary license if licensed in another state

### **COMMENTS**

- Reciprocity on Indian reservations - Impact of AB 108
- CPhA opposes reciprocity

### **THIRD PARTY SOLUTIONS**

- Place more onus on 3rd party - hold accountable

- Shift 3rd party issues away from community pharmacies
- Offer incentives for 3rd party to pay for counseling and pharmacist services
- 3rd party provides Rx for more people - don't shut the door

### **COMMENTS**

- No incentive to perform pharmacy services
- Patients cannot choose provider
- Costs - in managed care, time is money
- Get rid of 3rd party problems - N. Carolina model
- Cause of stress is 3rd party
  - payment
  - formulary changes
- Recognize role of 3rd party in this problem - follow the \$

## **SUPERVISION/ PHARMACIST-IN-CHARGE/ COUNSELING**

### **SOLUTIONS**

- Pharmacist-in-Charge supervise more than one pharmacy
- Do survey, use Nebraska model - where are pharmacists practicing?
  - 3.6 Rx/hour/pharmacist
- Screen recommendations to what extent changes make on pharmacists - shift responsibility vs. quality of care
- Enforce standards # per hour (CPhA)
- Counseling on all Rx
- Counseling
- Counseling on all Rx
- Need time to do counseling
- Retired, nonworking pharmacists could be used for counseling rather than hard work such as filling and running the pharmacy.
- Re-examine consultation regulation - does public want them?

### **COMMENTS**

- supervision issues
- Advocacy role takes time
- Seniors will need more time, more Rx, more consults
- Ensure access for patients to pharmacist's care
- Supports all solutions to help pharmacists take care of patients
- Push pharmacist care so it exists in reality
- No one wants to be PIC, responsibility, error rates
- Pharmacist-in-charge jobs being turned down

## **NUMBER OF PHARMACIES/ACCREDITATION**

### **SOLUTIONS**

- Accreditation board for pharmacies
  - staffing and counseling in retail setting
- Limit number of new pharmacies to make sure pharmacists are available
- Do not restrict number of new pharmacies
- Board look into non-pharmacist owner - revoke license

### **COMMENTS**

- Increased number of pharmacies means more pharmacists required
- Concerned with the idea of a pharmacy on every corner
  - are we over expanding licensure of pharmacies
- There are many new avenues to get Rx
  - in person
  - by mail
- Is there a shortage of pharmacists and an overabundance of pharmacies?
- Believe no shortage rather too many pharmacies

## **WORKING CONDITIONS**

### **SOLUTIONS**

- Higher wages
- More money - wages
- Improve job satisfaction by:
  - decreasing time stress
  - not so much ancillary work to technician requirements
  - pharmacists to take more stressful jobs
- Improve working conditions such as incentives for remote areas
- Improve working conditions

### **COMMENTS**

- Salary disparities among settings - Rural vs. Urban
- Longer hours pharmacies open means more pharmacists required
- Full-time/part-time
- Working condition - breaks and hours
- Graduates may want to work in clinical settings rather than retail
- Shortage because pharmacists unwilling to work in nonprofessional setting
- Pharmacies in community setting cannot fulfill duties
- Employers that have good working conditions have pharmacists
- Want better environment
- Workplace environment
- Have Board look at number of phones, walk-up windows, drive through, etc.

## **UNIVERSAL Rx CARD**

- Universal Rx card
- Universal Rx card idea excellent
- Universal Rx card - make process of finding insurance easier
- Texas model - Universal Rx card - be careful of language

## MISCELLANEOUS SOLUTIONS

- Advocate quality improvement programs
  - disease management
  - adverse drug reaction
- - pharmaceutical care
- Quality assurance programs - measure Rx load/errors - would see improvements
- Establish rehabilitation for error impaired pharmacists
- Better use of women
- Unification
- Scholarships/grants to students who then will practice in underserved areas of California
- Have schools look at manpower statistics
- Ralph's model
- Pharmacists should not have to come to work early to complete prior days work
- Other avenues for pharmacists to be successful
- Mail-order gives 90 day supply - change in-person (community) to 90 day
- Demand doctors PRINT Rx
- Board allocate resources to help solve problems
- Board set a standard of error rates - number or hours
- Number of Rxs/pharmacists per day

## MISCELLANEOUS COMMENTS

- Manpower shortage:
  - National situation:
    - California is one state among 50 and competes with the other states for pharmacists
    - Rx growth means increased demand for pharmacists
    - Increased demand for other health managers
  - Demand outpaces growth
    - Use women
    - Pharm.D. on a national level
  - California situation:
    - California imports pharmacists
    - Schools - # of new schools
      - # of graduates
- Wants to hear what others are proposing
- School situation:
  - Class size 200
  - 2 2/3 year to graduate
  - screen candidates for more commitment in workplace
  - help students prepare to take exam
- Cost of living in California is a deterrent
- Listening to students and discontent of practitioners: is this drawing people away?
  - are issues internal to operation discouraging potential candidates?
  - students don't always have opportunities to practice what they are taught
- Role of schools is to prepare graduates

- Demand has changed
- Pipeline
- Many alternatives for getting Rx
- If there is no shortage, why are headhunters calling? There is a shortage.



# **MINUTES: APRIL 27, 2001**

## **MANPOWER TASK FORCE MEETING**

### **DISCUSSION AND VOTING BY THE PANEL**

#### **Category C/B: Use of Ancillary Support and Technician Training**

##### **C-1: Expand the duties of the technician.**

##### **Arguments For:**

- If technicians are tested, could relieve pharmacists – does it?
- Highly trained, competent technician makes the workload smoother. Applicable regardless of setting.
- Appropriate quality assurance could lead to alleviation of manpower problem.

##### **Arguments Against:**

- Risk of error rises (the premise is that techs make more errors than pharmacists do).
- Untrained technicians make lots of errors.
- Confusion as to what clerks and technicians job really is. Is this an employer issue? (That is – job training and expectations)
- Pharmacists checking more that one technician causes more stress.
- Add stress to technicians.
- Pharmacist's license on the line.

##### **Comments on expansion of duties:**

Expand duties to what? (Following comments refer to background documents submitted for solution C-1, included in Board of Pharmacy mailing dated April 11, 2001)

- see additional item “i” down
- are “a-o” in regulations?
- “i” is the only new one (today, only a pharmacist can contact a doctors office)
- when dealing with robotic dispensing, a technician and check
- “l” speaks to automated equipment (monitored and maintained), the end product is pharmacist's responsibility
- “a-e” are non-discretionary, currently exist
- the rest are “implied”
- “l” can clerk check robotic machine output
- “a-e” is in book
- “g-o” is implied
- Pharmacist-in-charge always responsible

### **Other comments:**

- Education of technicians is an issue.
- Inpatient/outpatient – differentiate or integrate? that is, should standards be the same?
- Fresno study – 75/79 NO expansion of tech duties.
- Currently, no standards for technicians.
- Using current technician laws to the full extent would alleviate shortage.
- Certified technicians – make liability on their license.
- Retail must have a technician and a clerk.
- Don't increase technician duties until pharmacists consult.
- Requirement to ensure patient care.
- Only way to validate is to certify – use an outside source.
- Good technicians decrease pharmacist's stress.
- Bad technicians increase pharmacist's stress.
- Expanding role doesn't do any good if there are not more of them and if there is no education.
- How can one pharmacist fill 250 Rx /day?

### **Call for the question:**

**C-1: Expansion of the role of technicians could alleviate the manpower shortage when appropriate quality assurance processes are in place with the goal of increasing the pharmacist's role in performing patient care services.**

**YES: 9**

### **Interdependent issues:**

- Tech check tech
- Technician certification
- Ratios

Take another vote (on expansion of duties) when interdependent issues are discussed.

## **DISCUSSION OF INTERDEPENDENT ISSUES:**

### **C-4: Increase the ratio of technicians to pharmacists.**

#### **Increase ratio - Arguments For:**

- Decrease time it takes to fill Rx (techs fill bottles, pharmacist checks, then consults).
- Non-pharmacist (technician) can be 3<sup>rd</sup> party interface – if there was an extra technician.
- Increase ratio would help if technicians were hired in the first place. Employers are not compelled to hire.
- Technician/pharmacist ratio in hospitals is 2:1 – it works (are hospital techs trained differently?)

#### **Increase ratio – Arguments Against:**

- More technicians per pharmacist mean fewer hours for pharmacist (job security issue?)
- Technician would still be focused on 3<sup>rd</sup> party issues.

#### **Expand role/Increase ratio – Arguments For:**

- Less stress because pharmacist has more help.
- Majority of states allow 2:1, some have no limit.
- From a working pharmacist in Arizona – each additional technician allowed pharmacist to:
  - consult
  - DUR
  - check Rx filled by technicians
- If technicians fill – could alleviate stress.

#### **Expand role/Increase ratio – Arguments Against:**

- Overburdened technicians.
- Errors because pharmacists have less time to check work.
- With increased ratio, 3x more errors - “PIC” report.
- Pharmacist wants to “hold on” to duties and doesn’t give work to technicians
- Typists have no liability.

#### **Call for the question:**

**C-4: Expansion of ratio and role of technicians could mitigate shortage when appropriate quality assurance is in place ensuring the pharmacist’s role in performing patient care services.**

**YES: 11**

**B-2: Require the Pharmacy Technician Certification Board (PTCB) examination as a qualification for technician registration.**

**Technician education/certification explanations:**

- Certification – skills, knowledge to do technician job – not necessarily PTCB exam.
- If hours are not met, exam is OK.
- Opportunity to fast track.
- There should be a minimum standard.
- If technicians don't take on additional roles, no need for certification.
- One of the measures (metrics) for role expansion is technician qualification.

**Comments on technician test:**

- Want test to satisfy in/out patient.
- Want test to represent necessary skills.
- Liability expectations – insurance.
- PTCB is nationally recognized.
- Requiring more of existing technicians will cause most of them to quit.

**Comments on hour requirement for technicians:**

- 120 didactic hours not enough.
- Have more hours in conjunction with test.
- Minimum hours are 240.
- Re-evaluate current qualifications for technician registration.

**Technician education/certification – Arguments For:**

- Attract different individual.
- Chance for career path.
- Higher pay.

**Call for the question:**

**B-2: All technicians must demonstrate a minimum level of competencies (test, classroom, experiential) in order to be registered. Must include a grandfather with a window of opportunity to take an exam and pass.**

**YES: 11**

**ABSTAIN: 1**

# **MINUTES: JUNE 8, 2001**

## **MANPOWER TASK FORCE MEETING**

### **DISCUSSION AND VOTING FROM THE PANEL**

#### **Continuation of Category C: Use of Ancillary Support**

**The facilitator asked the panel to consider which of the remaining solutions they wanted to discuss from category C: C-3, C-6, C-7, and C-8. C-9 will not be discussed; as it was determined it was a process rather than a solution. The voting was as follows:**

| <u>YES</u> | <u>NO</u> |   |
|------------|-----------|---|
| 5          | 5         | C-3: Eliminate the clerk-typist ratio                                     |
| 2          | 8         | C-6: Create a “pharmacist assistant” classification                       |
| 6          | 4         | C-7: Allow for “tech check tech”  |
| 6          | 4         | C-8: Increase the number of pharmacist interns a pharmacist can supervise |

**It was determined to discuss C-7 and C-8.**

**C-7: Allow technicians to check technicians in the inpatient hospital pharmacy for unit dose drug distribution systems.**

What is it? Specifically pointed to the in-patient study. This committee doesn't have to anoint this idea. The board has been studying this issue already. All techs are not approved to check the work of other techs. Techs must pass an exam.

TV shows that identify errors in the process. How does Tech check Tech affect the pharmacist shortage? The errors may be greater by virtue of the documentation process. (Nurses, doctors).

Is there value in understanding the provisions of Tech check Tech that could be applied to the community setting?

The Board will provide the documents to the task force members about this issue. The value will be in endorsing or not endorsing the Board's study of the issue. The Board is considering extending the study for Long Beach Memorial and Cedar's Sinai.

#### **PROS:**

- Use of techs for non-discretionary repetitive functions.
- In hospitals, such practices have been shown to lower mortality rates.

#### **Call for the question:**

**Should the task force defer the discussion until the next meeting?**

**YES: 9**

**NO: 1**

**ABSTAIN: 1**

**C-8: Increase number of pharmacy interns a pharmacist can supervise.**

**PROS:**

- Enable pharmacist to increase their involvement with providing patient care services.
- NABP Model Rules allow a pharmacist to supervise two interns at one time.
- Should have more confidence than in the past because schools have instituted early practice experience. Students need more opportunities to practice. As they move along in their education, they learn more sooner and they can relieve the shortage by taking over more of the tasks.
- Should have more confidence to utilize interns because of quality improvement legislation and regulations that are in place to examine medication errors.

**CONS:**

- Supervising interns is a teaching situation. The pharmacist has to listen to what the intern is saying to patients. The pharmacist could not supervise more than one at a time.
- Takes more pharmacists' time, not less.
- You will not get many interns from out of state. There are a limited number of interns. If you pull them to one store, they go to another. They are all working if they want to. Does not solve the problem.

**Comments:**

Hold to 2 interns with some kind of classification system that separates underclassmen with graduates or out of state waiting for license.

What year in school dictates how much time is needed to spend with them. Not everyone is a good teacher. Some pharmacists are excellent and have shown they are capable of supervising more than one intern.

**Call for the question on the modification:**

**C-8: Modification: Change the number of pharmacy interns a pharmacist may supervise to two at any one time.**

**YES: 10**

**NO: 1 (on modification)**

Because of the tie vote on C-3, a brief discussion and voicing of opinion was carried out to determine whether to discuss.

**Should we revisit C-3 to discuss at this time?**

**Don Gubbins:**

Support increasing the clerk-typist ratio.

**Alan Endo:**

Opposed to the proposal. The task force has already made a proposal to increase the tech ratio. Throwing more people at this would not be beneficial.

**Dave Fong:**

Supports.

**Katherine Knapp:**

No position.

**Nancy Stalker:**

Not sure. Supports non-pharmacist handling majority 3<sup>rd</sup> party issues (non-clinical). Given the expansion of the tech and intern, too many people to supervise. Wants to see the whole picture.

**Holly Strom:**

Supports.

**Lloyd Young:**

No position but would like the discussion.

**Ralph Vogel:**

Unless we are talking about an overall package that promotes pharmaceutical care, we cannot vote on stand-alone issues. Difficult to look at individually. In the past, when retail wanted a tech, the pharmacy reduced the pharmacist hours. In-patient and retail pharmacy is two different fields and should be handled separately.

**Arnold Godmintz:**

Agree with RV. Can't look at the pros and cons without looking at the big picture.

Fred Mayer: Wants to discuss? What does this mean? Higher error rates? More stress? In support of discussing the clerk-ratio if it means taking care of insurance issues. Wants to know if the law says that someone can't do 3<sup>rd</sup> party issues now?

**Fred Weissman:**

Understand what virtue in regard with having someone resolve insurance matters. Caperelli vs. CVS. If the clerk is the one doing the typing and looking at the screen, then a second person could complicate matters. If it gives time to the pharmacist, then supports the idea.

**C-3: Eliminate the clerk-typist ratio**

Third party issues take up an inordinate amount of pharmacists' time. It has been suggested that a clerk could handle 3<sup>rd</sup> party. Issues are education and training. The issue might be a person who has overlapping responsibilities. Coverage for all hours the pharmacy is open is crucial.

**PROS:**

- More staffing support.
- Help pharmacist reduce stress and potential for dispensing errors.
- Improving pharmacy services and quality of consultation.
- Relieving pharmacists' workload.
- Possibility of clerk handling 3<sup>rd</sup> party claims.
- Quality improvement programs are now in place that would give us more confidence. (Figueroa Bill) Intention for an ongoing program to monitor pharmacy dispensing activity.

**CONS:**

- Lack of adequate supervision.
- Possible theft and security issues
- Not sure quality improvement even at most optimistic would provide controls.
- A "business" person to handle 3<sup>rd</sup> party can't be within the walls of a pharmacy
- Limitation on how many one pharmacist can handle.

**Comments:**

1793: non-licensed person can enter information and type. At discretion of pharmacist, a clerk may handle refill information. Does this preclude other non-licensed person from being in the pharmacy? (delivery, insurance) NO, others allowed at discretion of pharmacist.

The reality is that people in the pharmacy do a multitude of jobs. If the insurance person is gone, the tech or pharmacist must handle it. What you are trying to do is get non-judgmental (3<sup>rd</sup> party) issues handled by someone other than the pharmacist. You don't want an abusive situation that is out of control. Checks and balances should be in place for pharmacist to feel comfortable for the situation.

If you are looking for flexibility, why not fill the extra slots with techs?

What pharmacists are looking for is an expert on insurance.

The concern was raised that a number of solutions adding technicians and interns had already been discussed and if the clerk-typist ratio was eliminated it may create an environment where the pharmacist on duty may not be able to manage effectively.

**Call for the question:**

**C-3: Eliminate the clerk-typist ratio.**



**YES: 3**

**NO: 8**

**Category A: Technology/Automation**

The panel was asked to vote **whether to discuss** the following solutions:

YES   NO

|   |   |   |
|---|---|---|
| 1 | 9 | A-3: Limit the number of telephones         |
| 9 | 1 | A-4: Allow for centralized processing       |
| 7 | 3 | A-5: Allow for automated dispensing systems |

**It was determined to discuss A-4 and A-5.**

**A-4: Centralized processing**

What is it? The processing by a Pharmacy of a request from another Pharmacy to fill or refill a prescription drug order or to perform processing functions such as dispensing, DUR, claims adjudication, refill authorizations, and therapeutic interventions.

In many cases, this process is legal right now, as long as the facility is licensed as a pharmacy. For instance, right now, this process only takes place under a common owner (a specific chain, Kaiser, etc.).

The solution is looking for a contractual arrangement to perform professional chores. Included are all the front-end tasks such as DUR, formulary changes. Tasks are “cleansed” and sent to the store.

For instance, a central location may be able to handle all the “scrub and clean” functions”. The central processing areas are not often licensed as a pharmacy. Patients still go to where they brought the Rx to receive counseling.

Pharmacists are not allowed to work at any place other than a licensed pharmacy. (As opposed to doctors and dentists, for example.)

Board of Pharmacy still has jurisdiction whether to license a facility as a pharmacy.

**Comments:**

Being able to shift many Rx to CP reduces the number (of prescriptions) that a local pharmacist must handle.

What is the rationale to have a phone in to a CP illegal versus a legal phone call to a local pharmacy?

A phone call to a pharmacist shows either a known or unknown patient. A CP is all unknown patient transactions.

**PROS:**

- Increases efficiency
- Outsources such functions as 3<sup>rd</sup> party claims processing
- Reduces time pharmacists must spend on CP functions
- Increases time available to pharmacists to perform pharmaceutical care and counseling
- Pharmacist has discretion whether to send a particular Rx to CP.

**CONS:**

- HIPA business associate has to comply with privacy regulations. Pharmacist has to provide the patient in writing where the patient's records may go.
- Privacy /confidentiality issues
- Pharmacist may not have all the necessary information to give to the patient.
- Patient may not have access to a live pharmacist rather than a computer screen.

**Call for the question:****A-4: Expansion of Central Processing could mitigate the Pharmacists Shortage with the following caveats:**

1. Protect patient confidentiality.
2. Right to face to face counseling.
3. New Rx transmitted electronically to pharmacy.
4. Pharmacist has discretion to where Rx gets "pushed."
5. Ability to check patient profile. Payer usually does cross-checking. (In practice, this might be impossible).
6. Electronic data is available to everyone that needs it.
7. If done correctly, this process is transparent to patient.
8. Any other information that may be pertinent to patient care is available.

**YES: 10****ABSTAIN: 1****A-5: Automated dispensing systems**

The intent of this proposal was to have a Board endorsement of ADS. Safe systems management, quality, backup processes should be addressed. Some type of guidelines should be established.

Legislative process is long and difficult. The board should be given leeway to look into automated systems that are progressive and forward thinking. Example: Telepharmacy.

Board should be supporting systems that will help people. Characteristics of a good system are: Safe, effective, timely, patient centered, equitable, and efficient.

To give legislative authority to the Board is not a good idea.

**PROS:**

- Technology can be an effective tool in increasing productivity and safety
- Vendors can do training and maintenance of ADS
- Anytime you take the manipulation of a refill out of a pharmacy, you save time.

**CONS:**

- Questionable accountability

**Call for the question:**

**A-5 : Facilitate the increased use of technology and distribute information on how technology can improve efficiencies.**

Included are the following caveats:

1. Empower the Board of Pharmacy to authorize projects that evaluate, test, and implement new technology that would enhance patient care all within the current laws rules, and regulations.
2. Technology should be safe, effective, patient-centered, timely, efficient and equitable.

**YES: 10**

**(1 member left early to catch a flight)**

**Category G: Workload and Working Conditions**

The panel was asked to vote whether to discuss the following solutions:

YES   NO

|   |   |   |
|---|---|---|
| 4 | 6 | G-1: Allow the pharmacist-in-charge to be in-charge of more than one pharmacy.          |
| 4 | 6 | G-3: Require patient consultation on all new and refill prescriptions.                  |
| 5 | 5 | G-6: Mandate that a pharmacy has adequate staffing.                                     |
| 9 | 1 | G-10: Implement quality assurance programs to measure prescription workload and errors. |

**It was determined to discuss G-10.**

Holly Strom mentioned that the Board was working on quality assurance programs. By general consensus, the panel decided that they would not need to discuss G-10.

After discussion, the panel decided to revisit the voting on the 3 other solutions in “G” at the next meeting. The decision was made to discuss the issue of substitutes on the panel. Because of this, the panel thought that a “full” panel should be allowed to vote whether to discuss these solutions.

**Voting deferred until the next meeting:**

**Solution G-1:**

**Allow PIC to supervise more than one pharmacy**

**PROS:**

- Duties designated to PIC do not require PIC to be continually present in the pharmacy
- Allows continuity and efficient use of pharmacist knowledge
- Allow PIC to become more proficient and extend those proficiencies to other pharmacies
- Mentoring

**Solution G-3: Require patient consultation on all new and refill Rx**

**PROS:**

- Better patient care monitoring particularly drug interaction

**Solution G-6: Mandate that a pharmacy has adequate staffing**

**Solutions the panel voted not to discuss:**

C-6: Create a “Pharmacist’s Assistant” classification.

A-3: Limit the number of telephones.

G-10: Implement quality assurance programs to measure prescription workload and errors.

**Concluding comments and assignments:**

Next meeting:

1. Be prepared to talk about C-7, Tech check Tech after reviewing document sent by the Board.
2. Revisit the vote on G-1, G-3, G-6.
3. Be prepared to reprioritize remaining solutions by category. The same voting procedure for determining which solutions to discuss will be followed. The remaining categories are:

- |                    |   |
|--------------------|---|
| a. Category D:     | California pharmacist licensure examination |
| b. Category E:     | Reciprocity                                 |
| c. Category F:     | Third party payers                          |
| d. Category H:     | Pharmacies                                  |
| e. Category I & J: | Miscellaneous                               |

At the final meeting, the panel will be able to look at all the solutions that have a positive vote to see how all the recommendations fit together. A final vote on each will be taken so a cohesive package can be sent to the Board.

## **Discussion about whether to allow substitutes at following meetings:**

**Alan Endo:**

No position. We had rules before. I have tried to make every effort to be here. But those not here represent a huge constituency.

**Dave Fong:** Wants to “be joined at the hip” with every member of the task force. Supports having subs.

**Katherine Knapp:**

Supports.

**Nancy Stalker:**

Supports, very uncomfortable not having all represented.

**Holly Strom:**

Supports.

**Lloyd Young:**

Supports. Would be more supportive if others not present today also supported.

**Ralph Vogel:**

Supports as long as appointed by organization.

**Arnold Godmintz:**

Supports.

**Fred Weissman:**

Supports. Concern about those not in attendance with those not here today. How would they vote on proposals today?

Steve Litsey, Board President. It was stated at the January meeting that there would be no substitutes for the purpose of consistency. Proposed at April meeting and discussed that subs might be possible. Came to Bob Elsner and Patty Harris in May/June. Rule stood for June meeting. Is it fair for those that have missed to change rules? People considered as subs seem to be “up” on the issues. Will members be committed to the process with subs?

## **MINUTES: JULY 24, 2001**

### **MANPOWER TASK FORCE MEETING**

#### **DISCUSSION AND VOTING FROM THE PANEL**

##### **C-7: Tech Check Tech** **continuation from previous meeting**

The two studies were very well conducted and planned. Can this be transposed to a hospital situation? These two facilities are two of the top. Was this a plan to make into some sort of regulation? This may not be appropriate for every facility.

Numerous studies of tech check tech have been done around the country. There are three states doing this: Minnesota, Kansas and Washington. In the context of hospitals, all hospitals have quality programs. Medication errors in dispensing errors would not be tolerated in the hospital. Doses go through a triple check: pharmacist, technician, and nurse. Multi-discipline approach. The board could outline this kind of procedure in the regulation. Quality assurance could be maintained. The key is training and quality assurance.

Techs are better than the pharmacist? Alan answered according to the study (numerical value) techs are slightly better. A little bit suspect about an in-house study. An outside agency would have better credibility.

The process in the study is a linear study. Which means it is only as good as the weakest link. We have already voted on B-2. (requires tech certification). B-2 should be treated as a caveat to C-7.

In 1995, spoke against tech check tech. 38 county associations did not want it. The Fresno study shows that pharmacists do not want this. Why not? Techs can be certified, but by definition, techs cannot perform tasks that require judgment. Nurse may not realize drug interaction. Pharmacist is responsible for errors. The incident in Walnut Creek: The tech made an error, but the pharmacist is responsible. At the end of shifts is when pharmacists must be at their best. The concept needs to move beyond tech check tech.

The concept is intriguing. Not looking at what has been traditionally in place. If the protocols are in place, if the tech is certified, if there is a method for mitigation, no problem with tech check tech. Trying to look at the practice of pharmacy differently than today. It may take another level of scrutiny to provide for TCT.

Disagree with the comments that the study was suspect. The study was designed by UCSF School of Pharmacy, an independent body.

In response to Phil Grauss's comment about inconsistency, in whether or not pharmacist might review the medication order. According to the board, TCT will only occur in the appropriate hospital setting. Under the terms of JACHO accrediting, there must be an ongoing process to review medication errors. In-patient only, not community pharmacies, or long-term care centers.

In-patient setting only, unit dose drugs only, situations where no judgment, lots of training. What is stated in the regulation and the roll seems appropriate. Out-patient definitely not appropriate.

The people involved in the study are highly professional and have academic backgrounds. Review the study again with this in mind. The proposal is specifically for in-patient, unit dose drug distribution systems. To bring in other situations are unfair and not germane to the topic or solution. The profession needs to get beyond worrying about lawyers. Empower the PIC to supervise so the situation is well controlled so that the quality of the practice is high, and that PIC has control over the quality. When the PIC has control over quality, PIC will take responsibility and liability. That is the trade-off.

Back in 1995, a big discussion about TCT was whether the Board has the authority to change. A consideration is whether this could be done through regulation or would legislation be required. The Guild statistics show that in-patient techs make 3 times as many errors as out-patient (9/1000 in-patient, 3/1000 outpatient.) Does this suggestion free up the pharmacist?

Tend to agree with the concept. The problem is the implementation. The pharmacist does bear the responsibility. It would be nice to see a well crafted proposed regulation.

Pharmacists don't have the confidence that the techs will be well trained and educated. How do you get over the fear of less than good techs? Some hospitals have good techs, but not all do. Where is the monitoring? Everything sounds great in concept, but the actual doing is not.

The concept seems good, but pharmacists have trouble being in charge of all these techs. This is a slippery slope that may some time be applied to out-patient as well.

### **Comments from audience:**

This issue is unique because it was part of a regulatory submission in 1995. Organizations that submitted comments should be asked again. Liability issue. Another comment that relates to the study is the idea of triple check - nurse checks drug. There is a grave nurse shortage, nurses are not checking. Others are. Techs do not evaluate all judgments that are performed by a pharmacist. Numerous comments that lots of errors were being caught at tech ck tech. PIC is liable - who is controlling the environment? Hospital or pharmacist? Does PIC have authority to make appropriate changes? Cost saving for hospital. Task force did not get all the info about the 1995 proposal.

1995 was six years ago. Are the comments still relevant? The task force should use their expertise to deal with the situation today. If the proposal goes forward, the information could be pulled and included.

As much experience as anyone in hiring techs. Focus on patient safety. Ten years ago, the nurse was the final arbiter. Today with the nursing shortage and traveling nurses, question whether TCT makes sense.

Letter from president of tech school in Fresno. Techs do not have the medical instinct. Techs are not qualified. The goal is to get TCT into the retail setting so that retail establishment will not have to pay higher salaries of pharmacists.

In 1995, a 7 page document that questions the validity of TCT. Deep questions. Read the document.

It is obvious that some like the concept. Need more studies at a larger hospital like UCLA or LA County. If you really like TCT, students must be trained to trust techs and techs must be trained better (name brand and generic). Are techs willing to pay for their own insurance?

Request to amend the statement that only techs that are board certified be allowed to check. PTCB certified. Then many might be more comfortable.

Sometimes in CA, we think we know it all. What applies in other states may or may not work. What was the logic used as to why TCT was passed in 3 other states? How does it continue? Is there a reason why we are so negative toward the concept? Is there any evidence about what is happening in the states that allow it? Make decisions based on more knowledge.

**C-7 with amendment: Allow only PTCB certified technicians to check technicians in the inpatient hospital pharmacy for unit dose drug distribution systems.**

**Voting on accepting the amendment for discussion, not accepting as a solution:**

**YES: 9**

**NO: 3**

**ABSTAIN: 1**

Another issue that has been raised for another amendment: What protection does the PIC have in dealing with their employer when they disagree with the situation for TCT?

Does not mandate, only allows practice to happen if would create safe environment. If the tech is being audited, the pharmacist can check the cassettes.

Not sufficiently satisfied that the word “allow” is adequate.

Employer may say, “I don’t care whether you trust the techs, or whether you like the environment”. Unless there is a system in place, the PIC wants to be able to say, “I don’t like what is happening and I want to be able to change it.” Always include the pharmacist in the process.



Guarantees of non-reprisals that PIC can exercise their professional judgment in supervising the tech. Take the time to become familiar with a new tech and what they can do. Comfort level is vastly differently hospital to hospital.

In the real world, employers may say we're going to make this happen because it will cost less. Put some amendment in that will empower the pharmacist to use professional judgment to control the techs and the environment.

Needs very careful consideration of many different aspects. Knowing that there are different capabilities and personalities in each circumstance. What if a particular hospital were to receive Type I violations, would you still proceed with the TCT? The issue is not simple. There needs to be lots of detail in the actual wording of the substance.

I need more information about what other states have done. Can we build a proposal around additional information? Washington has been doing this about 10 years.

What protections in the regulations for PICs and experiences do they have to share with our board? Could we see the proposed regulations from 1995?

LA County has more patients than all three states put together. Would you go to a county facility if you had anything else to choose from? It is manpower issue. They have shortages also. Don't just think of the high profile and elite hospitals.

A sample of policy and procedure was included in the original documents that were provided. Go back and look at - it was in a big stack.

**A motion was made and seconded:**

**Table further discussion on the amended solution until the panel can get information on: 3 states (Minnesota, Kansas, and Washington): standards for techs in the 3 states; (e.g. do they require tech to be certified?) policy and procedures standard to be followed (if they exist); experiences of inspectors about the system; protections for pharmacists; any changes in staff turnover rates; info on 1995 regulations; comments from organizations like CSHP, CPhA etc.; error rates; to whatever extent the information is available.**

**Vote on above statement:**

**YES: 9**

**NO: (go back to vote on the amended solution) 4**

The Board meeting in October will be bringing up all the proposed regulations that are floating around. The TCT is one of those issues. It is just an informational meeting. All interested parties will have the opportunity to bring their comments forward. Testimony from organizations mentioned above will be available at the board meeting.

Does the above mean a formal statement is required from the organization? Or are the comments from task force members that represent the organization adequate for the discussion.

Can we simply vote on the concept and leave the ultimate detail for the regulation? Can we vote on the amendment with some caveats?

Can we not develop a statement regarding TCT without calling for another meeting and have to read through voluminous documents? The role of the task force is to consider important issues without going in a lot of detail.

Would like to see the information from other states without thinking of all the other bad stuff.

**Should we remove C-7 from the table and go back and revisit the amended statement and add caveats?**

**YES: 6**

**NO: 6**

**ABSTAIN: 1**

**A tie means the motion does not pass.**

### **Category G: Workload and Working Conditions**

At the June 8 meeting, the following votes were taken.

The panel was asked to vote whether to discuss the following solutions:

| <u>YES</u> | <u>NO</u> |  |
|------------|-----------|--|
| 4          | 6         | G-1: Allow the pharmacist-in-charge to be in-charge of more than one pharmacy          |
| 4          | 6         | G-3: Require patient consultation on all new and refill prescriptions                  |
| 5          | 5         | G-6: Mandate that a pharmacy has adequate staffing                                     |
| 9          | 1         | G-10: Implement quality assurance programs to measure prescription workload and errors |

At the end of the June 8 meeting, the panel decided to revote on the “G” items at the July 24 meeting, after the substitute issue was settled.

Revote on G-1, G-3, G-6

G-1:

YES: 3

NO: 10 NO DISCUSSION

G-3:

YES: 5

NO: 7

ABSTAIN: 1 NO DISCUSSION

G-6: a vote on the original statement in the original documentation

YES: 1

NO: 12 NO DISCUSSION

The panel was asked to rank the remaining categories to **determine the order of discussion**: Category D: California Pharmacist Licensure Examination; Category E: Reciprocity; Category F: Third Party Payers; Category H: Pharmacies; and Category I: Miscellaneous. The ranking was as follows

1. Reciprocity
2. CA Licensure Exam
3. Third Party Payers
4. Pharmacies
5. Miscellaneous

### **Category E: Reciprocity**

The panel was asked to vote **whether to discuss** the following solutions:

Solution E-1:

Allow reciprocity

YES: 4

NO: 7

ABSTAIN: 1

Solution E-4:

Provide a one-year temporary license to a pharmacist licensed in another state

YES: 2

NO: 9

ABSTAIN: 2

After brief discussion, the panel decided to send a statement to the board regarding reciprocity:

**The task force rejects the concept of reciprocity.**

**YES: (supporting the above statement) 6**

**NO: 5**

**ABSTAIN: 2**

### **More discussion on reciprocity:**

California should consider that out of state pharmacists are capable of practicing in California. If CA does not want to consider reciprocity, at least consider going half way and giving out of state pharmacists the opportunity to practice right away. Are there other conditions such as experience, when they passed NAPLEX, etc. that could be used to help getting them into practice.

We are not saying others cannot come here, but that they have to follow the same standards. Are there some that want to just try it for fun (semi-retired)? The language must take this into consideration. The guild represents out of state pharmacists also. We have a right to be arrogant. We are better.

A motion was made and seconded to vote on the following statement:

**The task force rejects the idea of a temporary one-year license for out of state pharmacists.**

**Vote:**

**YES: 8 (in support of the above statement)**

**NO: 4**

**One member left.**

**Category D: California Pharmacist Licensure Examination**

The panel was asked to vote **whether to discuss** the following solutions:

D-1: Offer the examination more than two times per year.

YES: 12

NO: 0

D-4: Eliminate the essay section and only offer a multiple choice/  
true-false format

YES: 7

NO: 4

ABSTAIN: 1

**D-7: Assist applicants in preparing for the examination (full text to follow).**

YES: 11

NO: 1

**D-8: Increase the number of failed attempts from four to six before an applicant has to take additional coursework.**

YES: 5

NO: 4

ABSTAIN: 3

**It was determined to discuss all the above solutions.**

**D-1: Offer the examination more than two times per year.**

**Comments:**

In the current format, 3 times a year is the maximum number the board can offer the exam. (Because of the grading format - essay).

A way to increase the number of people taking the exam.

People can be trained to grade the exam. The MCAT, for example is graded by trained professionals, not volunteers. Could be put on a computer and offered continuously.

**Call for the question:**

**Offer the exam more than 2 times per year with the goal of moving toward offering it on a continuous basis.**

**YES: 12**

**NO: 0**

**D-4: Eliminate the essay section and only offer a multiple choice/true-false format.**

**Comments:**

Needs to be an objective body regarding the validity of the essay versus the m/c and t/f rather than saying the essay is the measure of competence versus the whole.

Is the board currently looking at the exam evaluating the value of the essay question? Prefer to defer to the board.

The essay for the most part is short answer. Fairly objective - necessary for expression.

Unless the M/C is passed, the essay is not graded.

Could the test be passed in sections, such as the Bar exam and CPA exam. Is the exam accomplishing what it should? The board should look at the efficacy of the exam. Offer the opportunity to retest on only the section that is failed. Other professions have determined that they can get all the information necessary in a M/C format. Does the essay adequately measure what it is supposed to?

Psychometricians are those that study high stakes exams. There is no evidence that short answer questions test anything different than multiple-choice questions.

**Call for the question:**

**Solution D-4 has been amended to read as follows:**

**Consider retesting M/C or essay section only if only one is failed.  
Furthermore, that the board evaluates whether the essay adequately  
measures what it is supposed to.**

**YES: 12  
Unanimous**

**D-7: Assist applicants preparing for the California pharmacist licensing exam by:**

1. Developing (or fostering the development of) educational programs and information on how to take the pharmacist exam.
2. Request that outside agencies (schools of pharmacy and private educational organizations) develop exam workshops on how to take the California Pharmacist Exam.
3. Develop and distribute an informational brochure that contains sample essay questions for the California pharmacist licensing exam.

**Call for the question:**

**YES: 11  
ABSTAIN: 1**

**Comment:**

There may be a perception that students coming from out of state are weaker or less prepared based on the pass rates. The PharmD. pass rates only were pulled out. The board's pass rate is 50-60%. The better schools should have students that could pass the exam. Information about the exam is not available to out of state students.

**D-8: Increase the number of failed attempts from four to six before an applicant has to take additional coursework**

A motion was made and seconded to vote on the following statement:

**The task force rejects the notion of increasing the number of failed attempts from 4 to 6 before an applicant has to take additional coursework.**

**YES: 8 (supports the above statement)  
NO: 1  
ABSTAIN: 3**

**Comments:**

Does not address the shortage.

Missing the point. Students don't want to hang around with the high cost of living. Will lose them to other states.

Should have the opportunity to take as many times as they want. A person ought to realize that they can't do it and move on.

Realize the reasons the board limited the number of times to begin with. Active questions were showing up on a sample test given in one exam preparation course. Someone took the exam 30 times for the purpose of memorizing the questions.

### **Category F: Third Party Payers**

The panel was asked to vote **whether to discuss** the following solutions:

F-5: Require a universal prescription insurance card

YES: 9

NO: 2

Another member has left

F-6: Allow all community pharmacies to be automatically enrolled in all HMO's as a universal provider.

YES: 0

NO: 8

ABSTAIN: 3

**It was determined to discuss F-5.**

### **F-5: Require a universal prescription insurance card**

#### **Comments:**

The proposed legislation only has to do with large employer plans. The question of whether it will reduce stress and work for the pharmacist is not addressed.

Supportive of the concept, but does not address issues such as ERISA.

Because some form of the solution is already going to legislature, do not support the task force taking up the issue.

Does this provide more time for the pharmacist? Would it provide more time for the pharmacist to provide patient care?

The Arthur Anderson study suggests that about 20% of the pharmacist's time is spent on 3rd party issues. Are we being too narrow in making the recommendation? Should we support a standardized way to issue prescriptions such as a universal patient database?

Third party is really the third party problem. Why should the pharmacist be involved in these issues? Put the responsibility back on the third party. Keep the pharmacist out of the loop.

The card has the intent of how to process the claim. It does not address formulary changes.

Even if the card reduces the time by 10%, does not address the shortage.

Is there something else we could do without interfering with federally preempted programs?

The North Carolina bill expounds on the responsibilities of the third party versus the pharmacist. Creates two benefits: reduces the stress in the pharmacy, gets a better result more often and puts a better light on people considering the pharmacy profession.

If all the edits couldn't be done, costs could not be managed, so the drug benefit might disappear. The point of payment is the only place that interaction can occur.

**Motion to table F-5 until the next meeting:**

**YES:6**

**NO: 4**

**ABSTAIN:1**

**Concluding comments and assignments:**

**Next meeting: September 14 in Sacramento.**

The order of discussion for the September meeting is as follows: C-7, all the homework needs to be done in advance. The Board administration will send out whatever information it can gather about the items in question (earlier in this document) concerning C-7, TCT. The panel will take no more than 1 hour to resolve. The panel will then discuss F-5, H and I.

**October meeting:**

October 10 location to be announced. A late afternoon/evening meeting is desired. The idea here is to tie everything together and allow for some audience participation.

Think about a structure for the last meeting and offer suggestions at September meeting as to how to manage the October forum.



# **MINUTES: OCTOBER 10, 2001 MANPOWER TASK FORCE MEETING**

## **DISCUSSION AND VOTING FROM THE PANEL**

### **Opening comments:**

#### **Steve Litsey, President of the Board of Pharmacy:**

1. At the July Board meeting, the Board voted to proceed to use NAPLEX for the minimum competency exam. Legislation will be crafted and put forth in 2002.
2. All minutes from task force meetings have been sent to the Board. The intent is to have a report for the Board at their January 2002 meeting.

#### **Facilitator comments:**

At the end of the July 24 meeting, the panel determined the order of discussion for this meeting is as follows: C-7, F-5, H and I.

The facilitator reviewed the voting on TCT that occurred on July 24, 2001. The panel was reminded that today's discussion on TCT would be limited to one hour.

Each panel member was asked to state their position on TCT and make any relevant comments:

### **C-7: Tech Check Tech**

**Harold Washington:** Not changed, against TCT. Decided by the House of Delegates at the annual meetings as a policy statement.

**Holly Strom:** In favor in moving forward of TCT in in-patient settings for unit dose drug distribution systems. Appropriate quality check must be in place as described in documents submitted from the Washington and Minnesota programs. Encourage task force to approve the concept and ask the board to consider. Qualification and restrictions must be in place.

**Alan Endo:** In favor. The materials supplied showed there is nothing that precludes the adoption of proposal. Techs can do as well and sometimes better than pharmacist as long as there is training, certification, and the right circumstances. Washington's program demonstrates that TCT can be done effectively and with the assurance that there is a high level of quality. The hospital pharmacist needs to have repetitive functions delegated to someone else. The pharmacists must do pharmaceutical care functions that the repetitive ones should be managed by a Tech. This function must only allowed for in-patient, unit dose drug distribution systems.

**Phil Grauss:** Not in favor. Phil solicited many local associations and got interesting information. The major obstacle is the liability issue - the pharmacist puts his/her livelihood on the line when they have no say so in the hiring. Only two other states do this, what about the other 48? I don't believe the accuracy of the study. I came across an instance in my own practice this week that could have had very serious consequences. (Procrit 4000 instead of 40000)

**Don Floriddia:** UOP is opposed for many of the reasons already cited. Especially when the hiring of the tech is left to someone else.

**Howard Hertz:** The Guild is opposed. In addition to reasons Phil stated. Some techs can do an astonishingly good job, but the reality of the matter is in practice, this will not happen. Liability is also a big issue. Studies have selectional bias. Quality assurance measures are often not included in the legislation, even though the task force is for those assurances.

**Dave Fong:** California Retailers Association supports the concept of TCT in a hospital setting and for unit dose drug distribution systems. We support the Board with framing the concept and promulgation of regulations in the hospital setting for unit dose drug distribution system based on the evidence on the Washington and Minnesota settings. Support the idea of the Board moving forward. Want to hear and listen a lot more to the concept to support the concept in practice.

**Arnold Godmintz:** Speak for consumers. Don't have any real principled objection to the TCT. In order to support the idea, my support is conditional on:

1. Adequate safety measures as part of the initial legislation and not leaving it to the regulators.
2. See a general upgrading of the role of the tech in a pharmacy setting.

The task force has not really dealt with that issue. As someone who has been around legislation, often when proposals come forward issues of safety, when it gets to the capitol, those things are out the window. Only after catastrophe do we start talking about safety. Safety measures must be immediate.

**Fred Weissman:** Talked to a number of individuals in the hospital setting and tend to support in that setting. I am very concerned about the boundaries. Must be in-patient and quality assurances. The trickling to community setting would be totally inappropriate. The hospital in-patient setting seems to make some sense.

**Nancy Stalker:** CAHP is not taking a position. According to the literature, Washington and Minnesota has a request system for TCT. Tech training far exceeds what we see today. If this were put in place, it would need to go above and beyond to have those assurances.

**Fred Mayer:** PPSI against TCT.

1. Being a non-profit, it is not in the best interest of patients not to have a ph in the process.
2. The pharmacist has no say so in the hiring.
3. Liability - the employer must be accountable. Recent compounding error where tech failed to sterilize a compound solution that led to 4 deaths and 21 people to the hospital.
4. Due to recent studies in reduction of hospital errors, TCT is not in the best interest of consumers.
5. Not enough oversight as it is. How does this help the hospital pharmacist? I thought the task force was dealing with manpower issues.
6. Last week, I found an error in bubble pack that would go the skilled nursing facilities. The pharmacist must check.
7. If techs could be held liable and must have minimum certification. Pharmacist needs to be talking to patients in the beds.
8. 49% of all errors are wrong pill in the wrong bottle (Ken Baker, VP of Iowa insurance). Relate this to bubble packs. If studies show techs can do this better, make them liable. Against TCT in any setting at this time.

**Don Gubbins:** As I read C-7, I am following Alan and Holly's comments to have the Board pursue the concept of the pharmacist in becoming more involved in DURs.

#### **Comments from audience:**

**John Cronin** on behalf CPHA: TCT was raised in 1995 as part of the regulatory process. We provided comprehensive comments that raise a number of issues. I have not heard anything

How will the board justify a need for a staff pharmacist in the hospital pharmacy when the 1st hospital with TCT decides to terminate its clinical program? How do you get the pharmacist back in the pharmacy?

I urge you to count John Pèrez's vote, even though he is not here.

**Stan Goldenberg:** Recognizing the hospital setting. I also propose closed door institutional facilities be included in the hospital setting of TCT regulations.

**Jay Young:** When a practicing pharmacist hears TCT, all sorts of bells go off. The pharmacist has already been involved. The pharmacist has it in the beginning, a tech puts it together, then a tech checks, then a nurse. The idea scares ph because they think this could go out in the retail setting. Called Washington (Mr. Chester) - there are strict guidelines, only hospitals that qualify can do this. It does free up a pharmacist to some of the critical functions. TCT (in Washington) is not intended for retail setting. A couple of states have tried to push TCT in retail, but got shot down. The concept does not do anything to solve the pharmacist shortage.

## Comments from panel:

**Holly Strom:** appreciate comments from Fred, Arnie, and Phil. Should be a different set of accountabilities if TCT is put in place for hospital settings. Agree that no hiring control. Only cream of crop of techs must be allowed to do this. This cannot be a blanket for every hospital. Intensive, rigorous, accountable not only for the techs, but for the pharmacist and the hospitals. We've had a lot of emotional discussion. We are hearing reasonable demands for the implementation. Long-term care setting could be possible. In-patient only, techs do no pre-bubbling. I feel confident that sufficient controls could be put in place. The reason that other states don't do it is because it takes a lot of work. Other states look to California for standards.

**Phil Grauss:** According to Guild surveys, in-patient settings made 3x errors than outpatient. Are they more critical? Probably yes. The Guild sent out the surveys. There is a shortage of nurses, so that particular checkpoint may not happen.

**Harold Washington:** On the TCT that is done in the hospital setting, is it only for refills? Yes, only for the next 24 hours. If there is a change, does the ph see? Yes. For those voting for TCT, if someone proposes TCT in the outpatient, what is your position? Everyone says NO.

**Howard Hertz:** TCT is a reasonable idea under certain circumstance. I work in in-patient. The best move up and out. If you have a program set up to utilize the best of the best, what do you do when they leave?

**Holly Strom:** The best of the best have to qualify. Not just everyone can do. Hospital would not be permitted by law to do TCT. If no one is there that day, you can't do it.

**Howard Hertz:** There is no great supply of techs, so I don't see this as an answer to the shortage.

**Alan Endo:** In terms of clinical pharmacy programs, I think the environment has matured quite a bit in the evolution of the practice. In the LA Times last weekend, I was amazed at the number of clinical pharmacists want ads. I train all my pharmacists to perform clinical skills, they do consults, and they review culture and sensitivity reports. Hospital pharmacists want to be in charge of the total system. They need to be out there with the doctors in making drug decisions. TCT is specifically for the in-patient. Must have proper training and certification. Where errors occur, do they go back and find out what the problem was? You must really investigate to see if all the conditions have been met.

**Dave Fong:** Pharmacy is getting a bad rap. New drugs entering the marketplace. It starts at the doctor. What often happens is the wrong drug is prescribed. Those decisions happen without the pharmacist involved. Must get the pharmacist today involved in prescribing the drug to begin with. We need more visibility as to what we can do to contribute to health care. We have not had much. I don't see TCT in outpatient. If we can get in-patient TCT, our job could get more respect -

indirect benefits may be realized if we make sure the patient's care is managed properly.

**Lloyd Young:** No faculty vote on TCT. We are supportive of TCT in the in-patient setting.

**Motion to delay the vote with no additional discussion until John Pèrez arrives. Seconded.**

**YES: 6**

**NO: 4**

**ABSTAIN 3**

**Delay the vote. (Understood the vote will be at 1 p.m.).**

#### **F-5: Require a universal prescription card.**

##### **Comments:**

**Nancy Stalker** noted that AB207 passed - it deals with this issue.

The panel had a general consensus that no more discussion was needed on this issue.

**Dave Fong:** Even with the passage, there is still a problem. The smaller third party plans are not governed by the law which could be a large percentage of some pharmacies' business.

**Nancy Stalker:** applies to licensed plans within California - universal card.

##### **Remaining Solutions:**

The panel was asked to vote **whether to discuss** the following solutions:

H-1: Require community pharmacies be accredited.

Yes: 3

NO: 9

Abstain: 1

H-2: Limit the number of pharmacy permits.

Yes: 4

No: 9

H-3: Allow the board to grant waivers to keep pace with innovative, technological and other advancements to enhance the practice of pharmacy.

Yes: 6

No: 3

Ab: 4

I-2: Provide scholarships/grants to pharmacy students who will then practice in underserved areas of California.

Yes: 11

No: 0

Ab: 2

I-6: Do nothing.

Yes: 0

No: 12

Ab: 1

I-7: Re-establish the Bachelor of Pharmacy four-year degree program to oversee the drug distribution, pharmacy technician dispensing and to manage the pharmacy.

Yes: 1

No: 12

**It was determined to discuss H-3 and I-2.**

**H-3: Allow the board to grant waivers to keep pace with innovative, technological and other advancements to enhance the practice of pharmacy.**

**Holly Strom:** Current law provides that certain studies can take place in conjunction with a school of pharmacy that requires a waiver of certain regulation. For instance, at the VA, video machines are used to conduct consults. Above the video, a cabinet of certain drugs can be “released” electronically after consult with a pharmacist.

**Patty Harris:** the pharmacist controls the machine over distance. This only applies to clinics licensed by the board in order to implement. The board does not have the authority to grant waivers that would waive statute in order to implement.

**Phil Grauss:** Minnesota permits TCT under waivers. Would California do this?

**Holly/Patty:** Yes, it is part of Long Beach study and the Kaiser study.

**Phil:** Would future waivers be part of a school?

**Patty:** Yes, a medical school or pharmacy school?

**Lloyd Young:** Can the Board waive a statute?

**Patty:** No, only a regulation.

**Fred Weissman:** For instance, emergency contraceptives.

**Holly:** Only doctors can prescribe.

**Patty:** Health manpower project - go into rural areas where problems going on and conduct studies. Scope of practice.

**Herold:** Have any waivers been rejected?

**Patty/Holly:** No, this is how you have to do it. Must be in accordance with study protocols and research practices. Takes lots of time and money to get approval. All waiver requests go the Board and its all public and comment is solicited.

**Herold:** For instance, if we want to study TCT in an outpatient study, that possibility is out there.

**Holly:** The board could reject.

**Nancy:** What capability then does this do?

**Patty/Holly:** Certain provisions of statutes are not included. We only have the authority to waive regulations. Board would like to be able to waive legislation. Video conferencing is an example.

**Giny:** Sometimes statutes are broader. Look at the specific provision, it a circumstance by circumstance.

**Dave Fong:** We've empowered the Board of Pharmacy to represent us in the practice of pharmacy. There is good balance on the board. There is a lot going on in pharmacy. To test new ideas, we have to jump through too many hoops. The board and the practice of pharmacy are stymied. We need to do more R&D. Give the board the authority to conduct tests- jump to the future.

**John Cronin:** People come in with lots of good ideas. When the board can, they make accommodations. This solution is necessary for the board. Just waive the requirement and let them to try it.

**Stan Goldenberg:** In Arizona, a zero-based program established. No regulations, all the disciplines of health care will be present (doctors, pharmacists, nurses, school). The idea is to try to move health care forward with unique solutions.

**Call for the question:**

**H-3: Allow the board to grant waivers to keep pace with innovative, technological and other advancements to enhance the practice of pharmacy.**

**Yes: 12**

**One member is out of the room.**

**I-2: Provide scholarships/grants to pharmacy students who will then practice in underserved areas of California.**

**Fred Weissman:** How would this be funded?

**Dave Fong:** Sponsor legislation providing scholarships and forgiving student loans by creating a health care workers foundation to attract and retain pharmacists in underserved areas including communities where there is a pharmacist shortage. This entity should be a nonprofit corporation with the goal of raising funds from foundations and governmental agencies and other sources to ensure patient access to pharmacists' care and prescription services.

**Dave Fong:** Very fragmented and inconsistent. Are pharmacists able to give high care in underserved areas?

**Holly Strom:** Steve, did you work for the Indian Health Care Service? (Yes) Is there a loan forgiveness program? (No)

**Dave Fong:** Other states have programs that offer loan forgiveness to physicians.

**Phil Grauss:** Is there any obligation on the recipient? (of Dave Fong's proposal).

**Dave:** I haven't gotten into the details.

**Arnie Godmintz:** The proposal is motherhood and apple pie. No funding source and needs lots more detail.

**Motion to accept Dave's statement, seconded.**

**Motion to vote I-2 and use Dave's statement as one way it might be accomplished. Seconded.**

**YES: 13**  
**Unanimous**

#### **Comments:**

**Jay Young:** Could schools get more money to increase infrastructure? Example: the number of students in a class? Plenty of students in the pool, but turning away hundreds because there are no chairs.

**Fred Weissman:** We are seeing a drop in the application pool. Money could be spent on promoting the profession.

**Lloyd Young:** The issue is the funding pool. For example at the UC level.

**Jay Young:** Things are a lot more complicated than thought processes. Why can't classes be 100 or 200?

After lunch, John Pèrez joined the panel and Howard Hertz requested to make a statement. Howard was directed to resign The Guild from the task force. The letter of resignation is listed in the list of available documents. The panel noted that the Guild has been present and voted on all solutions including this morning's



session. The only vote the Guild did not participate in was C-7, Tech check Tech. With John Pèrez joining the panel after lunch, there are still 13 voting members on the panel.

**C-7 with amendment:**

**Allow only PTCB certified technicians to check technicians in the inpatient hospital pharmacy for unit dose drug distribution systems.**

**YES: 6**

**NO: 5**

**ABSTAIN: 2**

**Discussion of Voting Summary To Date:**

The facilitator provided the panel members with a draft summary of their voting to date. Each item was reviewed briefly. The panel was given the opportunity to ask any more questions or make any more comments:

**Comments after the summary was presented:**

How long until the Board takes action on items put forth in the document?

As soon as they can and in conjunction with their strategic plan. No groups are precluded from pursuing any action. Any group is free to pursue its own agendas via legislation or other means.

Is there going to be any discussion of interdependencies?

In particular, the ratio issue should be flexible and at the same time provide a high level of care.

**Notes for final document:**

The panel discussed the format and content of the final document. The executive summary will include votes, but readers must refer to the detailed comments to take judgments about any issue. Deliberations were thoughtful and over the course of 5 meetings and 10 months. Significant background material was requested and used in coming to the conclusions.

**The Facilitator offered the following sample of a Table of Contents:**

Members participating  
Executive summary  
Methodology  
Abbreviated version of votes  
Complete minutes of each task force meeting  
Appendix including a bibliography referring to documents such as the solution packets, the TCT material, etc. (Board needs to have documents readily available – people will have to ask for it, however).

**Comments from panel:**

How about sending a letter to schools of pharmacy, state execs, state associations and other state boards of pharmacy telling them to access it on the web? They can also request a hard copy if they want one.

Each meeting has been a public meeting. Any comments from the public have been included in the minutes.

## RESOURCE DOCUMENTS

1. Proposed Solutions and Evidence -- Supporting Documentation
  - Proposed Solution G-2  
Document: The PIC Report – Pharmacy in Crisis  
The Guild’s Comprehensive Survey on Errors, Stress, Technicians, State Boards of Pharmacy, State Pharmacy Organizations, Third Party Insurers  
(To obtain a copy contact: Guild for Professional Pharmacists – (818) 992-0475)
  - Proposed Solution H-1  
Document: 2001-2002 – Standards Manual for Home Care Pharmacy, Long Term Care Pharmacy, Ambulatory Infusion Services  
(To obtain a copy contact: Joint Commission Resources at [www.jcrinc.com](http://www.jcrinc.com).)
2. Comments from the Schools of Pharmacy
3. Report for an Experimental Program to Evaluate the Use of Board-Registered Pharmacy Technicians in Checking Medication Cassettes in a Unit-Dose Drug Distribution System  
A Collaborative Study Between the University of California, San Francisco School of Pharmacy and the Pharmacy Services Department of Long Beach Memorial Medical Center and Cedars-Sinai Medical Center – January 24, 2001
4. Independent Audit by the California Board of Pharmacy of the North American Pharmacist Licensure Examination and Action by the California State Board of Pharmacy Regarding the Use of NAPLEX in California – July 2001
5. Information from the states of Washington, Minnesota and Kansas on the Issue of Technicians Checking Technicians in Filling Unit-Dose Cassettes in Hospital Inpatient Pharmacies
6. “Systems for Checking the Accuracy of Filled Unit Dose Cassettes by Pharmacy Technicians”, by Larry T. Lovett, Pharm.D., Assistant Director and Lorna C. Spangler, Technician Coordinator – Memorial Hospital Medical Center, December 11, 1980
7. Lawrence Memorial Hospital – Kansas – Hospital Certification of Technician Checking Technician in Unit Dose Cartfill – 1991-1997
8. “A Program to Train and Certify Pharmacy Technicians in Filling and Checking Unit Dose Medication Carts” Hospital Pharmacy, Vol.31, July 1996

9. "Increasing Pharmacy Productivity by Expanding the Role of the Pharmacy Technicians"  
American Journal of Hospital Pharmacy, Vol. 49, January 1992
10. "Accuracy of Technicians and Pharmacists in Identifying Dispensing Errors"  
American Journal of Hospital Pharmacy, Vol. 51, February 1, 1994
11. "Using Hospital Pharmacy Technicians to Check Unit Dose Carts" Hospital Pharmacy, Vol. 29, May 1994
12. "A Study of Accuracy of Pharmacy Technicians Working in Unit Dose Systems"  
Hospital Pharmacy, Vol. 13, April 1978
13. "Errors Remaining in Unit Dose Carts after Checking by Pharmacists Versus Pharmacy Technicians" American Journal of Hospital Pharmacy, Vol. 35, April 1978
14. "Checking of Unit Dose Cassettes by Pharmacy Technicians at Three Minnesota Hospitals" American Journal of Hospital Pharmacy, Vol. 48, September 1991
15. Background Material on Technicians Checking Technicians in Filling Unit-Dose Cassettes in Inpatient Hospital Pharmacies
  - Rulemaking Materials from 1995 Proposed Regulation
  - Excerpts from Board Meeting Minutes – July 1995
  - Materials from Washington State
  - Comments and Materials from 1995 Informational Hearing on Technician Program
  - Report on Pharmacy Technician Pilot Study Program at LA County – USC Medical Center Outpatient Pharmacy – July 1975
  - Final Report of Subcommittee – Pharmacy Technicians in Hospitals – Presented to Pharmacy Liaison Committee for Hospitals – March 6, 1974
16. Letter of Resignation from Ralph Vogel, President and Executive Director, Guild for Professional Pharmacists

## ANNOTATED BIBLIOGRAPHY ON PHARMACIST WORKFORCE ISSUES

American Association of Colleges of Pharmacy. Profile of Pharmacy Students. Virginia. American Association of Colleges of Pharmacy, 2000.

Presents the results of a national survey of applicants to and students in colleges of pharmacy.

Bond, C.A., Cynthia L. Raehl, and Todd Franke. "Clinical Pharmacy Services, Pharmacy Staffing, and the Total Cost of Care in United States Hospitals" Pharmacotherapy. 20 (6) (2000): 609-621.

Analyzes the cost impact of eight specific clinical pharmacy services on the total cost of care in U. S. hospitals. Pharmacists providing the following services were associated with substantial reductions in the total cost of care: drug utilization evaluation, drug information, adverse drug reaction monitoring, drug protocol management, medical rounds, admission drug history. Pharmacists directing clinical research and total parenteral nutrition were associated with increases in the total cost of care. The study also found that increased staffing of clinical pharmacists was associated with reductions in the total cost of care.

Bond, C.A., Cynthia L. Rachl, Michael Pitterle, and Todd Franke. "Health Care Professional Staffing, Hospital Characteristics, and Hospital Mortality Rates." Pharmacotherapy. 19 (2) (1999): 130-138.

Analyzes the impact of health care professional staffing levels in hospitals on patient mortality rates. The study found that increased staffing of physicians, registered nurses, pharmacists, medical technologists, and total hospital personnel were associated with lower mortality rates. Increased staffing levels for administrators and practical/vocational nurses were associated with increased mortality rates.

Carvajal, Manuel J. and Patrick Hardigan. "First-Job Preferences and Expectations of Pharmacy Students: Intergender and Interethnic Comparisons." Journal of the American Pharmaceutical Association. 39 (January/February 1999) : 32-40.

This study surveyed pharmacy students at a Florida pharmacy school to determine employment preferences and expectations. The study found a strong preference (43%) among pharmacy students for working in hospitals or other clinical settings but the expectation that they would work in a chain store (54.8%) upon graduating. The survey also identified the students' anticipated sources of job satisfaction and dissatisfaction. Pay, helping patients, and counseling were the three strongest (in rank order) sources of anticipated job satisfaction. Overwork, unhappy patients, and inflexible work schedules were the three strongest (in rank order) sources of anticipated job dissatisfaction.

City of Long Beach, Economic Development Bureau. Occupational Outlook Los Angeles 1998: A Labor Market Information Study. 1998.

This report includes occupational profiles containing summaries of key information collected from confidential surveys obtained from several hundred local employers in Los Angeles County in 1998. Most profiles are based on 15 completed surveys per occupation. The profile includes wage, benefit and recruitment information. Median wage for a pharmacist in an entry level position was \$28.86/hour (range \$21.58/hour -- \$39.89/hour) and median wage for a pharmacist with 3 years in the same firm was \$35.00/hour (range \$30.35 -- \$43.63).

Cooksey, Judith A. "Workforce Challenges for Dentists and Pharmacists." Health Force Newsweek. 6 (Fall 1999): 1-3.

Summarizes recent findings and research regarding the supply of pharmacists and the projected demand for pharmacy services. Projects that pharmacist workforce growth will exceed population growth in the next ten years growing from a ratio of 70 per 100,000 in 2000 to 74 per 100,000 in 2010. Further projects that women will make up more than half the pharmacist profession in the next five years. Identifies considerable variation the number of pharmacy graduates with peaks in 1977 and 1996 of approximately 8,000 graduates and a low point in 1985 of 5,700. Asserts the existence of a pharmacist shortage at the time of writing.

Gershon, Sharon K., James M. Cultice, Katherine K. Knapp. "How Many Pharmacists Are In Our Future?" Journal of Managed Care Pharmacy. Volume 6, Number 6. 2000.

Describes and evaluates the Pharmacist Supply Model developed by the Bureau of Health Professions.

Health Resources and Services Administration, Bureau of Health Professions. A Study of the Supply and Demand for Pharmacists. December 2000.

Finds that there has been a clear shortage of pharmacists nationally since 1998. The factors causing the shortage are not likely to abate in the near future.

Health Resources and Services Administration, Bureau of Health Professions. United States Health Workforce Personnel Factbook

This publication compiles a wide range of demographic information and professional practice information for a wide range of health care professions. The data is gathered from a variety of other public and private databases.

Asian Graduates increased nearly 4 four fold from 1990 –1995 (4% -- 15%)

Pharmacy employment in hospitals increased 30% between 1983 –1993 despite the closure of 421 hospitals (6% reduction).

The ratio of pharmacists per 100,000 has grown from 62.2 in 1980 to 69.4 in 1996.

Health Resources and Services Administration, Bureau of Health Professions. HRSA State Health Workforce Profiles: California

This publication contains demographic information and workforce for pharmacists in California. Most notably, the document indicates that in 1998 California had 51.3 pharmacists per 100,000 population (48<sup>th</sup> in the Union) as compared to a national average of 65.4 per 100,000 population. California has 51 pharmacy technicians per 100,000 population (41<sup>st</sup> in the Union) compared to a national average of 64.7 per 100,000 population.

Knapp, K. "Charting the Demand for Pharmacists in the Managed Care Era." Journal of the American Pharmaceutical Association. 39 (July/August 1999) : 531-6.

Synthesizes a range of workforce projections and concludes that the downsizing projected the Pew Commission's third report will not occur.

Maddux, Michael S., Betty J. Dong, William A. Miller, Kent M. Nelson, Marsha A. Raebel, Cynthia L. Raehl, William E. Smith. "A Vision of Pharmacy's Future Roles, Responsibilities, and Manpower Needs in the United States." Pharmacotherapy 20 (August 2000)

Discusses pharmacy's changing philosophy of practice, factors influencing the evolution of professional roles and responsibilities, preparation for future roles, future leadership and management needs, workforce manpower projections, and qualifications for practice.

Pedersen, Craig A., William R. Doucette, Caroline A. Gaither, David A. Mott, Jon Schommer. Final Report of the National Pharmacist Workforce Survey 2000. Virginia: American Association of Colleges of Pharmacy, 2000.

Based on a national representative sample of pharmacists, this survey provides demographic and practice characteristics of the pharmacist workforce in the United States during 2000. Summary of findings attached.

The Pew Health Professions Commission. The Third Report of the Pew Health Professions Commission: Critical Challenges: Revitalizing the Health. December 1995.

This report considers the dramatic changes in the healthcare marketplace and their impact on the health professions from education, training and other workforce issues. Most notably, the report predicts that there will be an excess of 40,000 pharmacists in coming years.

Quiñones, Ana C. and Holly L. Mason. "Characterizing Part-Time Practice." Journal of the American Pharmaceutical Association. 40 (January/February 2000) : 17-25.

This study surveyed pharmacists to determine the factors motivating pharmacists to work part-time. True part-time pharmacists indicated the maintenance of work skills, flexibility of schedule, and balancing work and

leisure time. Moonlighters indicated overwhelming emphasis on earning more money.

Ranelli, Paul L., Raymond T. Coward. "Residential Differences in the Use of Pharmacies by Older Adults and Their Communication Experiences with Pharmacists." The Journal of Rural Health. 12 (1) (Winter 1996): 19-32.

This study surveyed seniors in both rural and urban areas to determine how their interactions with pharmacists varied. The survey indicated that seniors in urban areas were more likely to have conversations with pharmacists on a range of health related subjects and were more likely to have those conversations initiated by a pharmacist. However, urban seniors tend to have shorter conversations than their rural counterparts. Rural seniors were substantially more likely to regularly talk about medication use with their pharmacist and were more likely to use an independent pharmacy.

Shih, Ya-Chen Tina. "Trends in Full-Time Pharmacists' Labor Market Characteristics." Journal of the American Pharmaceutical Association. 40 (January/February 2000) : 26-35.

This study utilized Current Population Survey data for the past 30 years to uncover trends in pharmacist workforce issues. This study indicated that there has been a dramatic shift in the demographic makeup of the pharmacist workforce from a predominantly white, male group to one characterized by increasing diversity in both ethnicity and gender. The study also found a 10% increase in the number of hours worked by pharmacists. Lastly, the study finds the west and south have traditionally had fewer pharmacists than other regions.

State of California, Employment Development Department. Occupational Guide Number 159. 1998

This document provides statewide information about job duties, working conditions, employment outlook, wages, benefits, entrance requirements, and training. This guide also provides workforce projections developed by the department. Projects 28% growth in the demand for pharmacists between 1993 and 2005. Average pharmacist salary in California in 1996 was \$70,000.

Ukens, Carol. "Taking Charge." Drug Topics. 2 August 1999.

Discusses the growing number of women in the pharmacist workforce and their impact on the industry.

United States Department of Health and Human Services, Health Resources and Services Administration. Health Personnel in the United States: Ninth Report to Congress 1993.

A periodic report to Congress outlining the status of different health occupations including the distribution of and the supply/demand for those occupations.



United States Department of Labor, Bureau of Labor Statistics. Occupational Outlook Handbook 2000-01.

Revised every two years, the *Handbook* describes what workers do on the job, working conditions, the training and education needed, earnings, and expected job prospects in a wide range of occupations. Projects pharmacist job growth to be slower than overall job growth through 2008.

United States Department of Labor, Bureau of Labor Statistics. Occupational Employment Statistics 1998.

Survey data collected annually by the Bureau of Labor Statistics on wages and employment of non-farm workers. Data is broken down to state and metropolitan statistical areas for most occupations.